

REMARKS

Claims 1, 2, 4, 5, 7-9, and 12-15 are currently pending in the present application, with Claims 1, 4, 5, and 7-9 being amended and Claims 10 and 11 being cancelled. Applicants note with appreciation the courtesy of the Examiner during the telephone interview of November 17, 2008 with the undersigned and the representative of the assignee. Applicants submit that the following remarks reflect the substance communicated by the Applicant during the interview.

The Examiner rejected Claims 1, 2, 4, 5, and 7-15 under 35 U.S.C. § 103(a) as being obviousness by Roland VS-1680 Owner's Manual (hereinafter "Roland") in view of Ohmori et al. (US 2001/0008572 A1). This rejection is respectfully traversed with respect to the amended claims.

As discussed during the interview, the present invention as set forth in Claim 1 is directed to a signal processing apparatus, such as an audio signal processing apparatus that communicates with, and controls, a plurality of external devices bi-directionally.

The present invention as claimed has the following two primary aspects for controlling the operation of the plurality of external devices.

The first aspect is the signal processing apparatus receiving audio signals from an external device via an input port of the signal processing apparatus. To enable the flow of the audio signal into and through the signal processing apparatus, a plurality of input ports, a plurality of input channels, and an input channel are utilized in the apparatus. For example, one of the input ports receives an audio signal from one of the plurality of external device. The received audio signal is provided to one of the input channels in the apparatus. In this example, the input patch sets connection between said one of the input ports and said one of the input channels. As illustrated in Fig. 2 and discussed during the telephone interview, input port group 23G represents the "a plurality

of input ports,” input patch 22 serves as the “input patch,” and input channel 21 serves as the “input channel.”

The second aspect of the present invention is transmission of control signals from output ports to external devices in response to operation of operating elements of input channels. To enable the transmission of the control signal, setting means, operating elements, output ports, and transmission control means are utilized. Specifically, when an operating element is operated, the transmission control means controls to transmit a control signal from one of the output ports to one of the external devices. The output ports is determined by the correspondence between the output port and the input port that is connected to the input channel with which the operated operating element is associated; the correspondence being set by the setting means using a graphical user interface. For example, Fig. 7(B) shows example of a fader start/stop setting screen that serves as the graphical user interface of the “setting means.” In this example, the user set correspondence between one input port and two output ports. The faders 3(1)-3(n) shown in Fig. 3 or other operating elements written in paragraph [0079] of present application as published (publication US 2004/0028247) serve as “a plurality of operating element.” The output port group 29G in Fig. 2 serves as “a plurality of output port.” Applicant notes that the process of S207 of Fig. 8 is an example of a programmed processor corresponding to the recited “transmission control means.”

In the present invention, for example, a user of the apparatus can avoid inconsistency of communication between, on the one hand, flow of an audio signal from an external device to an input channel and, on the other hand, transmission of a control signal to an external device based on operation of an operating element, even if change of the input patch takes place. In terms of the flow of the audio signal, the connection between an external device and a channel depends on the

input patch. In terms of the transmission of a control signal, the connection between an operating element (channel) and an external device depends on the input patch and the values of the setting means. As a result, inconsistency of connections does not occur as far as correspondence set by the setting means even if the connections in the input patch are changed. That is, if the audio signal connection between an input port and an input channel set by the input patch is changed, the control connections between an external device and an operating element controls can change correspondingly without need of the user to make further changes. Accordingly, according to the present invention, every time connections of the input patch changes, the user does not have to switch physical connections between output ports and external devices to follow the change of the connections.

Neither Roland nor Ohmori et al. disclose or suggest “setting means for setting correspondence between each of said input ports and at least said output ports,” or the “transmission control means” as recited in the amended claims.

Roland discloses a digital mixer that inputs and mixes a plurality of audio signal, and output the mixed audio signal. Roland discloses connections of EQ, Fader and PAN in the input mixer on page 25 and connections of EQ, Fader and PAN in the Track mixer on page 26. Roland does not contain any disclosure or suggestion of transmitting, via output ports, control signals (i.e., non-audio signals) to external devices in response to operation of an operating element. In addition, Roland does teach or suggest setting correspondence between each of the input ports and at least one output port for transmitting control signals to the plurality external device and transmission control means configured to, when one of said operating elements is operated, control to transmit a control signal being non-audio signal from one of the output ports to one of said plurality of external devices.

Ohmori fails to make up for the deficiencies of Roland. Although Ohmori discloses VTR14A through 14 D to which the system control section 4 send a control signal S1 in Fig. 1 and paragraph 0051, Ohmori does not disclose or suggest setting correspondence between each of said input ports for receiving audio signals from a plurality external device and at least said output ports for transmitting non-audio signals to the plurality external device. In addition, Ohmori does not disclose the relationship of an input port, an output port, an input channel and an operating element at all. That is, there is no disclosure of transmission control means configured to, when one of said operating elements is operated, control to transmit a control signal being non-audio signal from one of the output ports to one of said plurality of external devices, wherein said one of the output ports corresponds to the input port that is connected to the input channel with which the operated operating element is associated.

Hence, the two references, even when combined, do not disclose or suggest the setting means and the transmission control means claimed in the Claims 1 and 5. Claims 8 and 9 are directed to a computer readable medium containing a control program. These claims are similar to Claims 1 and 5 in that each recite “setting correspondence between each of said input ports and at least said output ports” and “controlling, when one of said operating elements is operated, to transmit a non-audio control signal from one of the output ports to one of said plurality of external devices, wherein said one of the output ports corresponds to the input channel with which the operated operating element is associated,” that are not disclosed or suggested in the two references.

Finally, Applicants respectfully traverse the combination of Roland and Ohmori in that the two references are directed to very different types of technology. Specifically, Roland is directed to a digital mixing station for processing audio signals, while Ohmori is directed to video editing. The

two areas of technology are distinct such that one of ordinary skill in the art would not have been motivated to combine these references even if they were presented at the same time.

Accordingly, Applicants respectfully submit that Claims 1, 2, 4, 5, 7-9, and 12-15, as amended, are not obvious in view of Roland and Ohmori.

In view of the above, Applicants respectfully submit that all of the pending claims are in condition for allowance. If it is determined that a further telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below. In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 393032039900. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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